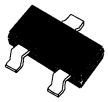
CMPF5484
CMPF5485
CMPF5486

N-CHANNEL JFET



SOT-23 CASE

Central™
Semiconductor Corp.

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMPF5484 Series types are surface mount, N-Channel JFET's designed for RF amplifier and mixer applications. These devices will operate well in the VHF/UHF frequency range.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL		UNITS
Gate-Drain Voltage	V_{GD}	25	V
Gate-Source Voltage	V_{GS}	25	V
Drain Current	I_D	30	mA
Gate Current	I_G	10	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J,Tstg	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

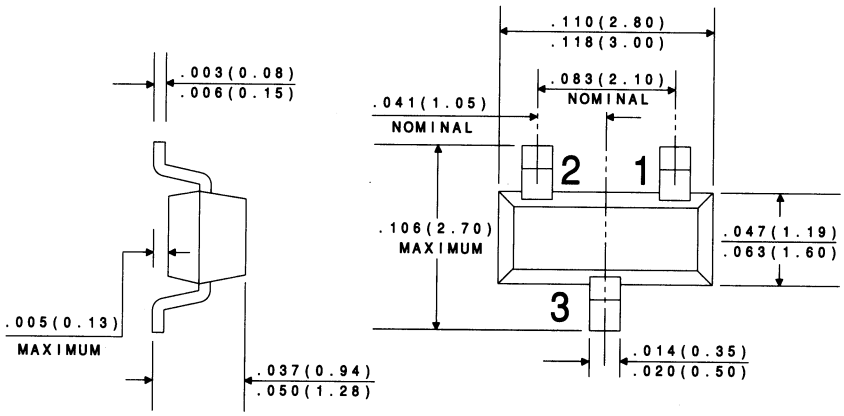
		CMPF5484		CMPF5485		CMPF5486		
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	UNITS
I_{GSS}	V_{GS}=20V		1.0		1.0		1.0	nA
I_{GSS}	V_{GS}=20V, TA=100°C		0.2		0.2		0.2	μA
I_{DSS}	V_{DS}=15V	1.0	5.0	4.0	10	8.0	20	mA
B_{VGSS}	I_G=1.0μA	25		25		25		V
$V_{GS(off)}$	V_{DS}=15V, ID=10nA	0.3	3.0	0.5	4.0	2.0	6.0	V
Y_{fs}	V_{DS}=15V, VGS=0, f=1.0kHz	3000	6000	3500	7000	4000	8000	μmhos
Y_{os}	V_{DS}=15V, VGS=0, f=1.0kHz		50		60		75	μmhos
C_{iss}	V_{DS}=15V, VGS=0, f=1.0MHz		5.0		5.0		5.0	pF
C_{oss}	V_{DS}=15V, VGS=0, f=1.0MHz		2.0		2.0		2.0	pF
C_{rss}	V_{DS}=15V, VGS=0, f=1.0MHz		1.0		1.0		1.0	pF
$R_{e(yis)}$	V_{DS}=15V, VGS=0, f=100MHz		100		-		-	μmhos
$R_{e(yis)}$	V_{DS}=15V, VGS=0, f=400MHz		-		1000		1000	μmhos
$R_{e(yos)}$	V_{DS}=15V, VGS=0, f=100MHz		75		-		-	μmhos
$R_{e(yos)}$	V_{DS}=15V, VGS=0, f=400MHz		-		100		100	μmhos

ELECTRICAL CHARACTERISTICS (cont'd.) (T_A=25°C unless otherwise noted)

		CMPF5484		CMPF5485		CMPF5486		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
$R_{e(yfs)}$	V_{DS}=15V, VGS=0, f=100MHz	2500		-		-		μmhos
$R_{e(yfs)}$	V_{DS}=15V, VGS=0, f=400MHz	-		3000		3500		μmhos
N_F	V_{DS}=15V, VGS=0, RG=1MΩ, f=1.0kHz		2.5		2.5		2.5	dB
N_F	V_{DS}=15V, ID=1.0mA, RG=1KΩ, f=100MHz		3.0		-			dB
N_F	V_{DS}=15V, ID=1.0mA, RG=1KΩ, f=200MHz		4.0 TYP		-			dB
N_F	V_{DS}=15V, ID=4.0mA, RG=1KΩ, f=100MHz		-		2.0		2.0	dB
N_F	V_{DS}=15V, ID=4.0mA, RG=1KΩ, f=400MHz		-		4.0		4.0	dB
G_{PS}	V_{DS}=15V, ID=1.0mA, f=100MHz	16	25	-	-	-	-	dB
G_{PS}	V_{DS}=15V, ID=1.0mA, f=200MHz		14 TYP					dB
G_{PS}	V_{DS}=15V, ID=4.0mA, f=100MHz		-	18	30	18	30	dB
G_{PS}	V_{DS}=15V, ID=4.0mA, f=400MHz	-	-	10	20	10	20	dB

All Dimensions in mm.

TOP VIEW



LEAD CODE:

1) SOURCE
2) DRAIN
3) GATE

MARKING CODE:

CMPF5484 - 6B
CMPF5485 - 6B1
CMPF5486 - 6H

DATA SHEET

R2